

WHAT IS CLAIMED IS:

1. In an distributed communications network having at least one remote node and one or more local nodes, each local node providing one or more services and at least one local node having a local scheduler, a method for managing upstream communications from the local scheduler, comprising the steps of:

(a) sending a request to transmit data related to a requesting service; ^{20,}

(b) receiving a grant specification from a remote node, said grant specification providing authorization to transmit data related to the requesting service; ^{21,}

(c) considering the needs of a plurality of services, said plurality of services including the requesting service and at least one other service; ^{22,}

(d) scheduling packets for said plurality of services in response to said considering step; and ^{23,}

(e) transmitting a burst based on the scheduled packets to the remote node. ^{24,}

2. A method of claim 1, further comprising the step of evaluating the current state of queues for each of said plurality of services.

3. A method of claim 1, further comprising the step of evaluating at least one of throughput and latency to consider the needs of said plurality of services.

4. A method of claim 1, further comprising the step of drawing data from a higher priority queue prior to drawing data from a lower priority queue to implement said scheduling packets.

5. A method of claim 1, further comprising the step of sending a piggyback bandwidth request with the burst.

6. A method of claim 5, further comprising the step of appending said piggyback bandwidth request to the burst.

7. A method of claim 6, further comprising the step of appending said piggyback bandwidth request to a voice packet.

8. A method of claim 5, further comprising the step of sending said piggyback bandwidth request as a message.

9. A method of claim 5, further comprising the step of sending said piggyback bandwidth request in a header frame.

10. A method of claim 1, further comprising the step of sending multiple piggyback bandwidth requests with the burst.